

ERP Flows in Scenario 1A:

Supplementary flows in dry and normal years in late winter (FEB-MAR) or early spring (APR-MAY) to supplement instream flow releases below reservoirs to mimic natural flow pulses. Derived by passing purchased inflow pulses to reservoirs if available from willing sellers. Sacramento and San Joaquin system pulses could be at different times per natural patterns – both designed to contribute to through Delta flows and outflow, but at different times – San Joaquin generally earlier. Used to stimulate subyearling smolt movement from rivers to Delta – and to move Delta smelt larvae to Suisun Bay (Sac flows at least). Also supports Delta productivity. April is generally a good month for larval smelt and wild salmon smolts, plus it coincides with VAMP. ERP San Joaquin flows could be used for VAMP flows. Better to supplement a river flow and outflow event. Could be used to help flush San Joaquin River and move smelt out of interior Delta. Purchase from main reservoirs. Purchase from diverters in small undammed tribs in dry years.

Applicable Years (assume sufficient inflow not available in critical years, but we could check):

Year	Potential Uses
1981 - Dry	Supplement a late April 17,000 cfs outflow event. Many salmon smolts in salvage so would be a big help. Larval smelt would be present in April given high juvenile abundance in May.
1984 – Wet/Normal	Normal San Joaquin year with subnormal snowmelt. Focus on low outflow period in late April to do most good. High salmon salvage historically in late April. Supplement VAMP, which is heavy hit for b(2) assets. Gaming reduced reservoir releases to backup water for later release to water supply – maybe not the best thing to do. San Joaquin flows could be late April and Sac flows could be early May.
1985 - Dry	Again late April during VAMP would help to reduce b(2) hit and piggy back on best time – supplement or pay for VAMP flows on San Joaquin side. Again, late April salvage peak historically, plus the first of small smelt juveniles. San Joaquin flows could be late April and Sac flows could be early May depending on inflow and environmental conditions.
1987 – Dry	Ditto
1989 – Dry	Ditto
1993 - Wet	Dry spring but good outflow – some streams could use a little help during VAMP period to help reduce high salmon smolt salvage in late April and early May.
1994 - Critical	Ditto with Dry Year. Critical but nice 15,000 cfs outflow pulse to supplement in late April – assume sufficient inflow to at least Sac reservoirs to do this.

**Conclusion:** Cost about 300 TAF in dry years – generally none in wet years – average for our 15 years = about 100 TAF.